

What is claimed is:

1. A system for automated loading of a side-by-side stack of thin objects to a thin-object feeder, comprising:

a) a transporter having a transport surface upon which a side-by-side stack of thin objects can be conveyed;

b) a carrier, configured to carry a side-by-side stack of thin objects, supported above said transport surface;

c) a pusher supported above said transport surface;

d) said pusher and said carrier being movable relative to one another between a first position in which said pusher is inside said carrier behind a side-by-side stack of thin objects on said carrier and a second position in which said pusher is laterally displaced from said carrier, such that the side-by-side stack of thin objects on said carrier is laterally slidable off of said carrier by said pusher.

2. The system of claim 1, wherein said thin objects include mail.

3. The system of claim 2, wherein said mail includes mail flats.

4. The system of claim 1, wherein said transporter includes a conveyor.

5. The system of claim 4, wherein said conveyor includes at least one conveyor belt.

6. The system of claim 1, further including independent drive mechanisms for said pusher and said carrier, wherein said carrier is driven in a fore-and-aft direction via a carrier support, and wherein the drive mechanism for the pusher includes a fore-and-aft drive component and an up-and-down drive component, and said pusher is movable into said carrier to engage thin objects therein.

7. The system of claim 1, further including at least one controller that controls said transporter and said pusher to change relative speeds of movement based on a detected stack error.

8. The system of claim 1, further including at least one controller that controls a rate of at least one of said drive mechanisms.

9. A method of automated loading of mail to maintain a side-by-side stack of mail on a mail feeder, comprising:

a) conveying a carrier filled with a side-by-side stack of mail to a location above said feeder;

b) laterally moving said side-by-side stack of mail and said carrier relative to one another such that the side-by-side stack of mail on said carrier is laterally slid off of said carrier and onto a transport surface of the mail feeder to a side-by-side stack of mail on the feeder.

10. The method of claim 9, further including laterally moving said side-by-side stack of mail with a pusher towards a mail stack processing location of the mail feeder.

11. The method of claim 10, further including conveying another carrier filled with a side-by-side stack of mail to a position adjacent the side-by-side stack of mail at the mail stack processing location.

12. The method of claim 11, further including raising the pusher and then moving said pusher to a position within said another carrier adjacent the side-by-side stack of mail in said another carrier.

13. The method of claim 9, wherein said laterally moving said side-by-side stack of mail and said carrier relative to one another such that the side-by-side stack of mail on said carrier is laterally slid off of said carrier includes laterally moving said carrier while a pusher is engaged with a rear of said side-by-side stack of mail.

14. The method of claim 9, wherein said laterally moving said side-by-side stack of mail and said carrier relative to one another such that the side-by-side stack of mail on said carrier is laterally slid off of said carrier includes laterally moving said side-by-side stack of mail in a direction of the feeder.

15. The method of claim 14, further including laterally sliding said mail from said carrier down a transfer slide.

16. The method of claim 10, further including controlling the transport surface and the pusher to change relative speeds of movement based on a detected stack error.

17. A method for upgrading a mail system having a transporter upon which mail is supported for movement and a pusher against which mail is supported during movement, wherein said pusher and said transporter are originally connected to move synchronously via the same drive mechanism, comprising:

a) providing a carrier support adapted to move above said transporter;

b) replacing the single drive mechanism with independent drive mechanisms for the transporter and the pusher, wherein the drive mechanism for the pusher includes a fore-and-aft drive component and an up-and-down drive component, and said pusher is movable to within a carrier upon said carrier support.

18. The method of claim 17, further including controlling said drive mechanism for said pusher in response to detection by a detector.

19. The method of claim 18, further including controlling a rate of said pusher so as to change relative to a rate of said transporter.

20. A method for processing mail delivered to at least one mail feeder having a conveyor from which mail is fed to a downstream system, comprising:

- a) delivering mail on a carrier via a delivery system;
- b) automatically delivering said carrier via said delivery system to the feeder without requiring an operator to handle said carrier; and
- c) automatically transferring mail from said carrier to the conveyor of the feeder.

21. The method of claim 20, further including providing said mail as mail flats.

22. The method of claim 20, further including having at least one preparation operator place non-bundled mail on the carrier.

23. The method of claim 22, further including delivering carriers from a plurality of preparation operator locations to a common supply, and delivering said carriers from said common supply to a plurality of feed operator locations proximate respective mail feeders.

24. The method of claim 20, wherein said delivery system includes a conveyor.

25. The method of claim 20, further including automatically returning said carrier from said feeder via a return conveyor.

26. The method of claim 20, wherein said automatically delivering said carrier via said delivery system to the feeder includes automatically delivering said carrier to or adjacent said feeder using an elevator.

27. The method of claim 26, further including automatically delivering said carrier to or adjacent said feeder generally vertically.

28. The method of claim 20, wherein said part a) includes delivering mail in a non-bundled state.

29. The method of claim 20, wherein said part a) includes delivering mail in a bundled state.

30. The system of claim 1, wherein said carrier includes a bottom surface having a plurality of raised areas.

31. The system of claim 30, wherein said bottom surface further includes a plurality of lowered areas.

32. The system of claim 31, wherein said plurality of raised areas alternate with said plurality of lowered areas.

33. The system of claim 32, wherein said carrier includes a movable front wall having a plurality of teeth at a bottom edge thereof, said plurality of teeth being aligned with said alternating raised and lowered surface areas.